Making Our Watershed
FIT FOR A KING

Habitat Plan for the Green/Duwamish and Central Puget Sound Watershed

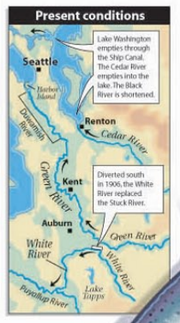
www.govlink.org/watersheds/

10 things YOU can do

1. **Conserve water**
   - Use efficient fixtures (toilets, clothes washers, and showerheads). Fix leaks. Cutting back on the water we use is good for the environment and salmon, and you'll save money.
2. **Use natural yard care**
   - Build healthy soil with mulch. Leave grass clippings on the lawn. Practice smart watering. Think twice before using pesticides. Use native plants.
3. **Take care of your car**
   - Wash your car on your lawn instead of the driveway. Better yet, take it to a carwash. Fix oil leaks in your car and recycle motor oil. Clean up spilled anti-freeze.
4. **Use proper disposal**
   - Dispose of unneeded household cleaners, paints, and other chemicals at hazardous waste collection sites. Do not pour down the household drain or storm drain.
5. **Preserve your shorelines**
   - Leave your streambank, lakefront, and Puget Sound shoreline vegetated with native vegetation to shade the water, reduce erosion, and provide insects that feed the fish.
6. **Remove invasive weeds**
   - Remove or control non-native invasives weeds such as blackberry, knotweed, and ivy that otherwise crowd out native plants.
7. **Plant a tree**
   - Plant native trees and shrubs to improve the ecosystem for fish, wildlife, and birds.
8. **Protect Puget Sound beaches and bluffs**
   - Use 'soft armoring' rather than hard bulkheads to protect property. Preserve trees that overhang the beach. Move rocks gently when exploring and leave driftwood in place.
9. **Consume wisely**
   - Buy products that have the least impact on water quality in their manufacture, use, and disposal.
10. **Get involved**
    - Volunteer to steward restoration projects by planting trees and controlling invasive weeds.

Conditions in 1906

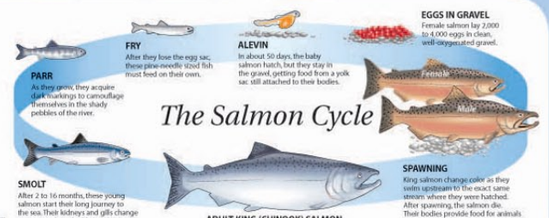
Present conditions



HISTORIC RIVERS

■ **The Green/Duwamish Watershed** was 1,640 square miles in 1906 when four river basins drained into Elliott Bay. Today it is reduced to 480 square miles. The Cedar River now flows into Lake Washington. The White River was diverted south in 1906 by a log jam. Citizens made this permanent by constructing a levee. The Duwamish River was straightened, reducing its length from 15 to 11 miles. Flooding was reduced by the construction of the Howard Hanson Dam and a series of levees–which made land in the valley much more attractive for development.

The Salmon Cycle



■ **Chinook salmon** were listed as 'threatened' in 1999 under the federal Endangered Species Act. In response, local governments, environmental groups, businesses, and state and federal agencies have worked together to create a science-based Habitat Plan for protecting and restoring salmon habitat. Completed in 2005, the Habitat Plan lays out recommendations for a healthier watershed for both fish and people.

Timeline

12,000 BC
Ice age ends and the Puget Sound glacier retreats.

Thousands of years before present
Indian peoples thrive on the salmon and other resources of the watershed.

1851
First settlers arrive in Duwamish estuary area.

1866
Population of valley starts to grow in ernest.

1870s
Major railroads build lines.

1880-1910
Major logging occurs.

1888
Northern Pacific Railroad constructs east-west line through the watershed.

1889
Washington granted statehood.

1895
Duwamish East Waterway construction begins.

1900
Extensive logging on Vashon Island.

1902
Green River Hatchery completed.

1906
Major flooding in rivers during fall and winter; log jam forces White River south.

1909
Harbor Island, at the time the world's largest artificial island, is completed.

1911
The White River is completely diverted to Puyallup River to reduce flooding problems.

1913
City of Tacoma completes its Headworks water diversion dam on the upper Green River.

1916
Lake Washington Ship Canal completed. Cedar River diverted to Lake Washington. Most of Black River dries up.

1917
Dredging fills more Duwamish intertidal areas and the East/West Waterways are finished.

1919
Private levee construction begins all along the Green/Duwamish rivers to prevent flooding.

1954
Seattle and King County development plan recommends the Howard Hanson Dam, converting 2,500 acres of farmland to industrial area, river dredging and estuary filling.

1963
Howard Hanson Dam is completed. Major floods are eliminated.

1977
Federal Clean Water act generally halts filling of freshwater or marine wetlands

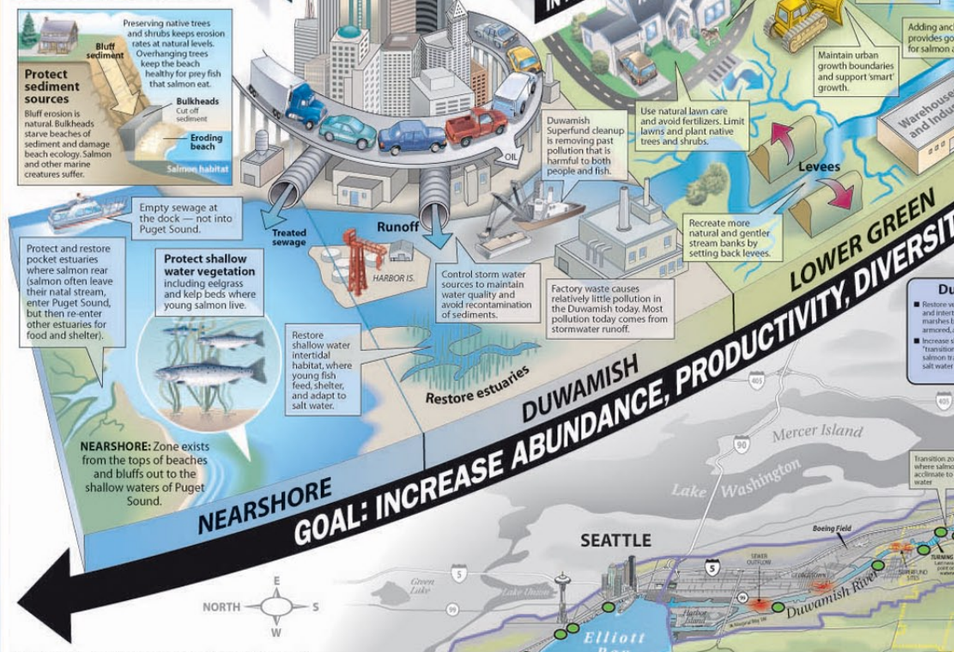
1990
Washington State Growth Management Act promotes denser, smarter growth.

1999
Federal listing of Chinook salmon and bull trout as threatened species; protection is required.

2015
Significant habitat improvements accomplished in first 10 years of Habitat Plan.

2055
Watershed is healthy for fish–and for people.

Our Watershed: Problems and solutions



Water Resource Inventory Area 9

- Subwatershed boundary
- City boundary
- Urban growth area line
- Salmon hatchery
- Levee
- **Contamination:** Highest concentrations of mercury, PCBs, PAHs, and phthalate contamination.
- **Restoration projects:** Proposed projects include reconnecting side channels, creating shallow-water and marsh habitats, planting native trees, setting back levees, adding gravel for spawning, culvert removal, removal of bulkheads, and restoring pocket estuaries.

August 2005

0508_W9poster.ai

Design and graphics by **Ben Garrison**

GREEN / DUWAMISH AND CENTRAL PUGET SOUND WATERSHED

King Conservation District

Poster produced with grant from King Conservation District